

CLAIMS

What is claimed is:

1. A method comprising:

receiving a request at a primary device to play an audio file, where the primary device is in a power saving state;
accessing a storage location on the primary device;
locating a play list which has a record of the audio file;
choosing the audio file from the play list; and
playing the audio file.

2. A method as in claim 1 wherein the primary device is a notebook computer.

3. The method of claim 1 further comprising accessing the storage location after first determining that there is no disk drive, or no readable medium (e.g. CD-RW) attached to the primary device.

4. A method as in claim 3 wherein the storage location is a hard drive.

5. The method of claim 1 further comprising accessing the storage location manually in response to a user request.

6. A method as in claim 1 wherein accessing the storage location further comprises mounting a volume associated with the storage location.

7. A method as in claim 6 wherein mounting a volume further comprises a file system manager:

reading a first sector of the volume to determine if the volume is formatted;
locating a first sector of a volume map associated with the volume;
locating a first sector of a root directory of the volume;
locating an index to a list of available play lists located on the volume; and

locating a first sector of the play list index.

8. A method as in claim 7 further comprising the file system manager sending the first sector of the volume map to a volume manager.
9. A method as in claim 7 further comprising the file system manager sending the first sector of the root directory of the volume to a file manager.
10. A method as in claim 7 further comprising the file system manager sending the first sector of the play list index to a Play List manager.
11. The method of claim 1 further comprising locating the play list associated with the audio file which a user has requested to be played.
12. The method of claim 1 further comprising locating the record in the play list associated with the audio file chosen.
13. The method of claim 12 further comprising obtaining the first sector of the audio file's location and the size of the audio file from the record.
14. The method of claim 13 further comprising playing the audio file by reading the first sector of the audio file's location and then continuing to read contiguous sectors according to the size of the audio file.
15. A method comprising:
 - powering on a primary device;
 - choosing a file to save to a storage location on the device;
 - locating the storage location on the primary device;
 - locating a list of audio files which have been saved to the storage location;
 - determining where to store the file;
 - writing the file to the storage location; and

writing information related to the file to a record.

16. A method as in claim 15 wherein the file is an audio file.

17. A method as in claim 16 wherein the file is an MP3 file.

18. A method as in claim 16 wherein the file is a WAV file.

19. A method as in claim 15 wherein locating a list of the audio files comprises determining where the audio file should be listed.

20. The method of claim 15 wherein a user may create multiple lists by selecting audio files and storing them in separate lists.

21. The method of claim 15 wherein the audio files are stored contiguously on the storage location.

22. A method as in claim 15 wherein a record is created providing information necessary to access the audio file.

23. A method as in claim 15 wherein the device is a notebook computer.

24. An apparatus comprising:

- a file system management logic block for a physical storage location;
- a volume management logic block for the physical storage location;
- a file management logic block for the physical storage location; and
- a song play list management logic block for the physical storage location.

25. An apparatus as in claim 24 wherein the file system management logic block to mount and dismount the physical storage location.

26. An apparatus as in claim 24 wherein the file system management logic block to format the physical storage location.

27. An apparatus as in claim 24 wherein the file system management logic block to control access to the physical storage location.

28. An apparatus as in claim 24 wherein the file system management logic block to access a record comprised of relevant information for each separate logic block.

29. An apparatus as in claim 28 wherein the record is located on sector 0 of the physical storage location.

30. An apparatus as in claim 24 wherein the volume management logic block contains a dual-linked list which contains the status of each sector on the volume.

31. An apparatus as in claim 24 wherein the file management logic block is responsible for file and directory management.

32. An apparatus as in claim 31 wherein the directory is a dual-linked list of file entries, each in their own sector.

33. An apparatus as in claim 32 wherein the dual-linked list contains a record of each file and each directory located on the physical storage location.

34. An apparatus as in claim 24 wherein the Play List management logic block tracks all the playable songs and corresponding play lists on the physical storage location.

35. An apparatus as in claim 34 wherein the Play List management logic block contains a play list index.

36. An apparatus as in claim 35 wherein the play list index is a structure containing a list of play lists for the entire physical storage location.

37. An apparatus as in claim 36 wherein a play list is a contiguous number of sectors that holds a play list structure wherein the play list structure contains the type of audio files in the play list and the location of the audio files in the play list.

38. A machine readable medium having embodied thereon a program for execution by a machine, the program comprising:

 a first code block segment for mounting and dismounting a volume;

 a second code block for keeping track of where files are located on the volume;

 a third code block for managing files and directories on the volume; and

 a fourth code block for managing and organizing a play list or multiple play lists on a volume, where a play list is a list of files.

39. A machine readable medium as in claim 38 further comprising the first code block to send the first sector of the volume map to the second code block.

40. A machine readable medium as in claim 38 further comprising the first code block to send the first sector of the root directory of the volume to third code block.

41. A machine readable medium as in claim 38 further comprising the first code block to send the first sector of the play list index to the fourth code block.

42. A machine readable medium as in claim 38 wherein the Play List is a List of audio files.

43. A machine readable medium as in claim 38 further comprising the fourth code block locating the play list associated with the audio file which the user has requested to be played.

44. A machine readable medium as in claim 38 further comprising the fourth code block locating a record in the play list, where the record is associated with the audio file chosen.

45. A machine readable medium as in claim 44 further comprising the fourth code block obtaining the first sector of the audio file's location and the size of the audio file from the record.

46. A machine readable medium as in claim 38 further comprising the third code block playing the audio file by reading the first sector of the audio file's location and then continuing to read contiguous sectors according to the size of the audio file.

47. A machine readable medium as in claim 38 further comprising the third code block storing or removing files from the volume.